

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 5, 6, 8-10, 12-15, 18, 24-28 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanaka et al (USPN 5,133,332). Tanaka et al a diamond tool fabricated with a single crystal diamond comprising the diamond having a crystal containing nitrogen in an amount of 0.5 ppm, boron in an amount of 0.05 ppm and nickel in an amount of 10 ppm, the tool having blade with an end having a plane orientation being a (110) plane, wherein the diamond tool is an ultra high precision cutting tool (note Fig. 2, examples 5 and 6, tables 5, 6 and 9).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4, 7, 11, 16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al (USPN 5,133,332) in view of Beeferman et al (USPN 5,340,012). Tanaka et al discloses the claimed invention as described above, however, Tanaka et al does not disclose a titanium brazing material is employed to attach the

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diamond to a main body of a tool. Beeferman et al discloses a titanium brazing material is employed to attach the diamond to a main body of a tool. Because both Tanaka et al and Beeferman et al teach a methods of attaching the diamond to a tool body, it would have been obvious to one skilled in the art to substitute one method for the other to achieve the predictable result of attaching the diamond to a tool body.

5. Claims 17, 19, 30 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al (USPN 5,133,332) in view of Oki et al (US 2003/0188550). Tanaka et al discloses the claimed invention as described above, however, Tanaka et al does not disclose the diamond is used for jewelry. Oki et al discloses a diamond used for jewelry (note Fig. 1, paragraph [0037]). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the diamond of Tanaka et al as disclosed by Oki et al in order to enhance the glitter of the diamond.

#### ***Allowable Subject Matter***

6. Claims 20-23 and 33-36 are allowed.

#### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Knippenberg et al, Kobayashi et al are cited to show synthetic diamond.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung V. Nguyen whose telephone number is 571-272-4490. The examiner can normally be reached on PHP Program.

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9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph J. Hail can be reached on 571-272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dung V Nguyen/  
Primary Examiner, Art Unit 3723  
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